

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS

BRAUN GmbH,

Plaintiff,

v.

RAYOVAC CORPORATION,

Defendant.

Civil Action No. 03-CV-12428-WGY

**DECLARATION OF SAMIR NAYFEH IN SUPPORT OF BRAUN GmbH'S  
MOTION FOR PARTIAL SUMMARY JUDGMENT ON INVALIDITY**

1. I am an Assistant Professor of Mechanical Engineering at the Massachusetts Institute of Technology in Cambridge, Massachusetts. A copy of my curriculum vitae is attached to this Report at Exhibit A.

2. I was retained by Braun GmbH ("Braun") to review the First Expert Report of Samuel R. Phillips, PE, dated May 23, 2005, and the Third Expert Report of Samuel R. Phillips, PE, dated June 27, 2005, and to opine as to the bases set forth in Mr. Phillips' reports upon which he purports to rely in support of his conclusion that the claims of the '328 Patent is invalid.

3. To arrive at my opinion, I have reviewed the '328 Patent and U.S. Patent No. 5,649,556 (the "'556 Patent") and the prosecution histories of these two patents. I have also reviewed the parties' Markman briefs, and accompanying exhibits, which I understand to have been submitted with the Court in this matter. In addition, I have

reviewed Mr. Phillips's first and third reports and the tabs and exhibits thereto. Finally, I have reviewed the transcript from the March 15, 2005 Markman hearing.

4. In my opinion, none of the prior art references cited by Mr. Phillips – the McKiney Patent, the Davies Patent or the Maatz Patent – anticipates claim 11 of the '328 Patent. I also disagree with Mr. Phillips' conclusions, among other things, on the issues of indefiniteness, written description, new matter, best mode, and inventorship.

## I. ANTICIPATION

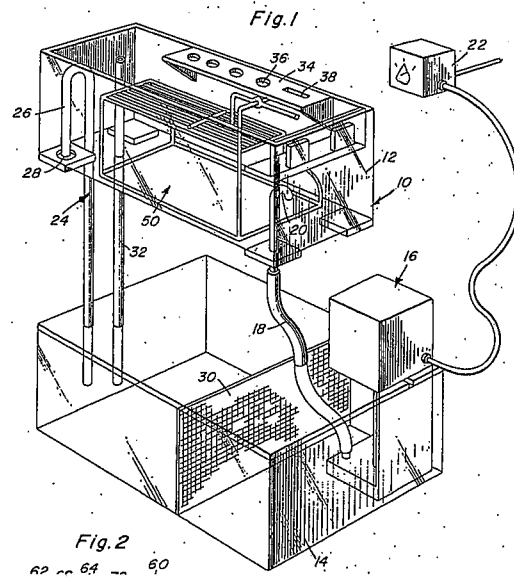
### McKiney Patent

5. Mr. Phillips opines that the McKiney Patent (U.S. Patent No. 3,365,267) anticipates claim 11 of the '328 Patent. See Phillips 1<sup>st</sup> Rep. at ¶¶102-108. I disagree. In particular, the McKiney Patent fails to disclose at least the following elements of claim 11:

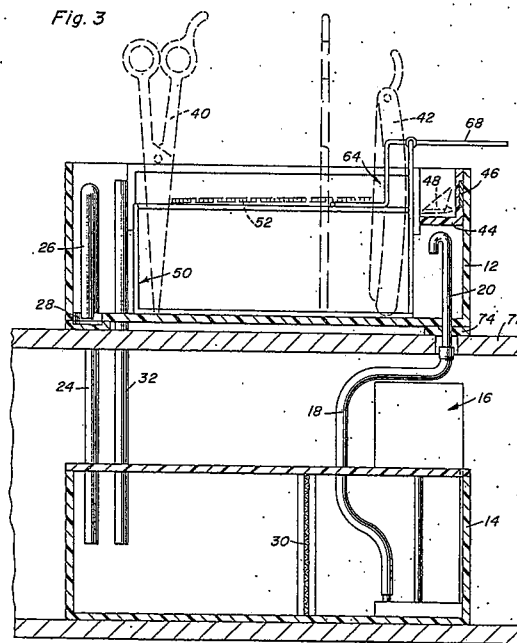
- “a cradle structure adapted to receive a shaving head of a shaving apparatus,” and
- “a drying device.”

6. The McKiney Patent discloses a sterilizing device for barber shop tools, such as razors, shears and combs. See McKiney Patent, col. 1, lines 21-23. Figures 1 and 3 of the McKiney Patent are reproduced below. The McKiney barber tool sterilizer consists of a lower tank (14) with a filter (30) and a pump (16). See id. at col. 2, lines 42-47. In addition, the sterilizer includes an upper tank (12) with a shelf (34) with holes and slots for holding scissors and razors. The upper tank (12) also includes a shelf (44, shown in Figure 3 below) with magnets (46) for holding clipper blades that have been disassembled from a hair clipper. See id. at col. 3, lines 27-40. In operation, sterilizing

fluid is pumped from the lower tank to the upper tank via a conduit (18). See id. at col. 4, lines 2-7. The sterilizing fluid then builds up in the upper tank, soaking the barber tools



in cleaning fluid. Once the tools are sufficiently clean, a siphon (24) sucks the fluid out of the upper tank to the lower tank, wherein lies a filter. See id. at col. 4, lines 8-14. The



tools then drip dry. See id. at col. 4, line 14.

7. *Cradle Structure Element.* Mr. Phillips argues that the shelf 44 of the McKiney sterilizer (illustrated above in Figure 3 of the McKiney Patent) into which clipper blades are placed and held with magnets, along with the entire upper tank 12, is “a cradle structure adapted to receive a shaving head of a shaving apparatus.” See Phillips 1<sup>st</sup> Rep. at ¶103. I disagree.

8. In particular, the Court has construed the cradle structure element of claim 11 as a structure adapted to support or receive a shaving head of a shaving apparatus and able to receive or retain fluid or both. Shelf 44 and upper tank 12 of the McKiney sterilizer do not constitute a structure adapted to support or receive a shaving head of a shaving apparatus. The clipper head (that is, the shaving head of Mr. Phillips’ purported shaving apparatus) is not supported or received by shelf 44. The shelf 44 merely provides a surface onto which clipper blades that have been disassembled from the head of a hair clipper apparatus can be support by means of magnets. Such a surface cannot be properly called a “cradle structure adapted to receive a shaving head of a shaving apparatus.” In addition, upper tank 12 is a large rectangular tub that holds liquid for sterilizing barber tools. Like the shelf 44 it does not support or receive the head of a hair clipper. Thus, neither shelf 44 nor upper tank 12 is adapted to support or receive a shaving head of a shaving apparatus.

9. In sharp contrast, the cradle structure of claim 11 is adapted to receive the shaving head of a dry shaving apparatus, without disassembly of the shaving head into its cutter and foil components. Indeed, the ’328 Patent is clear that the invention does not

involve disassembly of the shaving head of the shaving apparatus. See '328 Patent, Figures 1,2, and 6 (showing assembled shaving apparatus with cradle supporting and receiving an assembled shaving head); col. 2, lines 49-51 ("This enables the shaving apparatus to be inserted in the cradle without any effort and to be withdrawn therefrom without the need to utilize any parts closing the cradle"); col. 3, lines 60-63 ("Still further, it is advantageous that the shaving apparatus is insertable into a supporting structure configured as a bracket or a wall mount . . . ."); col. 5, lines 1-4 ("Setting a switching means from a first to a further position mechanically and/or electrically interlocks the shaving apparatus in the casing of the cleaning device for the full length of the cleaning and drying cycle.").

10. Therefore, the McKinney Patent does not disclose the claimed cradle structure of claim 11 of the '328 Patent.

11. *Drying Device Element.* Mr. Phillips next argues that siphon tube 24 is "a drying device." See Phillips 1<sup>st</sup> Rep. at ¶108. I disagree.

12. In particular, siphon tube 24 merely drains the sterilizing fluid from the upper tank to the lower tank. The tools then drip dry. See McKinney Patent, col. 4, lines

13. The siphon tube 24 is not a drying device since it is not a mechanism for active drying of the barber tools.

13. Therefore, the McKinney Patent does not disclose the claimed drying device.

14. In sum, the McKiney Patent does not anticipate claim 11 of the '328 Patent because, at a minimum, it does not disclose the claimed cradle structure and drying device.

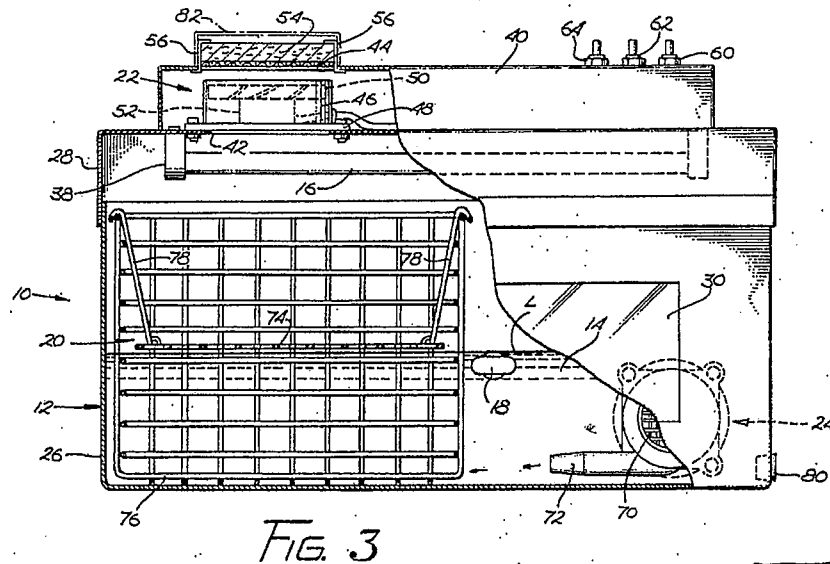
### **Davies Patent**

15. Mr. Phillips opines that the Davies Patent (U.S. Patent No. 3,478,758) anticipates claim 11 of the '328 Patent. See Phillips 1<sup>st</sup> Rep. at ¶¶113-118. I disagree. In particular, the Davies Patent fails to disclose at least the following elements of claim 11:

- “a cradle structure adapted to receive a shaving head of a shaving apparatus,”
- “a feed device for feeding cleaning fluid from said cleaning fluid container to said cradle structure,” and
- “said cradle structure being arranged above a fluid level of the cleaning fluid in said cleaning fluid container during the feeding of said cleaning fluid to said cradle structure.”

16. The Davies Patent discloses a cleaning and sterilizing device for barber tools using a germicidal lamp sterilizer. See Davies Patent, col. 1, lines 22-24. Figure 3 of the Davies Patent is reproduced below. The Davies device consists of a container (12) for holding cleaning fluid and germicidal lamps. See id. at col. 2, lines 22-23. Within the container is a perforated tray (74) for holding tools to be sterilized. See id. at col. 4, lines 34-37. During the cleaning operation, the tray (74) is lowered into the cleaning fluid which occupies approximately one-half of the container 12. See id. at col. 3, lines 14-17. In this lowered state, a pump is activated within the fluid causing a whirlpool effect. See id. at col. 4, lines 17-20. Thereafter, the tray is lifted from the cleaning fluid, but remains inside container 12. While in this raised position, exhaust blower 22

exhausts ozone into the atmosphere and thereby dries the tools. See id. at col. 5, lines 31-36, 49-51. Cleaning fluid is fed to and drained from the device through fitting 80.



17. *Cradle Structure Element.* Mr. Phillips argues that perforated tray 74 is “a cradle structure adapted to receive a shaving head of a shaving apparatus.” See Phillips 1<sup>st</sup> Rep. at ¶114. I disagree.

18. In particular, tray 74 is a basket that is not adapted to receive a shaving head of a shaving apparatus. As Mr. Phillips notes, the Davies Patent mentions hair clippers, see Davies Patent, at col. 5, line 75; however, the Davies Patent teaches placement of the clipper blades between a pair of counter-rotating brushes mounted on a motor enclosed in the casing at the rear of the container, see id. at col. 5, line 73 through col. 6, line 2. Thus, contrary to Mr. Phillips suggestion, the Davies Patent teaches support of clipper blades by the brushes rather than placement into the tray 74. Such brushes do not constitute a cradle structure.

19. To use the Davies device to sterilize hair clippers on tray 74, one would need to disassemble the head of the hair clipper – Mr. Phillips’ purported shaving apparatus – and remove the clipper blades. The tray 74 could provide a surface onto which clipper blades that have been disassembled from the head of a hair clipper apparatus can be support by means such as magnets. Such a surface cannot be properly called a “cradle structure” and is not adapted to receive the shaving head of a shaving apparatus.

20. Therefore, the Davies Patent does not disclose the claimed cradle structure.

21. *Feed Device Element.* Mr. Phillips next argues that because, in the Davies device, “fluid is fed from an external source through fitting 80” the Davies device discloses “a feed device for feeding cleaning fluid from said cleaning fluid container to said cradle structure.” See Phillips 1<sup>st</sup> Rep. at ¶ 116. I disagree.

22. The Court has construed the feed device element of claim 11 as a mechanism that feeds cleaning fluid from the cleaning fluid container to the cradle structure. The Davies device provides for no such mechanism. Instead, the cleaning fluid level of the Davies device is adjusted by manually feeding (through a hose connected to a conventional water tap) additional cleaning fluid through fitting 80. See Davies Patent, col. 4, lines 66-69, col. 5, lines 4-6. This manner of feeding is not properly considered a mechanism that feeds cleaning fluid.

23. Moreover, the claimed feeding device feeds cleaning fluid from the cleaning fluid container to the cradle structure. In this case, Mr. Phillips argues that the



cleaning fluid container of the Davies device is container 12. See Phillips 1<sup>st</sup> Rep. at ¶115. The Davies device provides no mechanism for feeding cleaning fluid from container 12 to tray 74, Mr. Phillips' supposed cradle structure. Instead, cleaning fluid is fed manually via an external source to container 12. See Davies Patent, col. 4, lines 66-69.

24. Therefore, the Davies Patent does not disclose the claimed feed device.

25. *Elevation Of Cradle Structure Element.* Mr. Phillips next argues that that the Davies Patent discloses, in one embodiment of the device, a "cradle structure being arranged above a fluid level of the cleaning fluid in said cleaning fluid container during the feeding of said cleaning fluid to said cradle structure." See Phillips 1<sup>st</sup> Rep. at ¶117. I disagree.

26. The embodiment referenced by Mr. Phillips is described in the Davies Patent as follows:

the implement tray 74 is supported in its elevated position of FIGURE 3, and the liquid 14 is initially fed to the container 12, through the fitting 80, until the liquid level rises above the implement on the tray. The implement is then submerged in its washing position within the liquid.

Davies Patent, col. 4, line 69 through col. 5, line 1. It is clear from this description that the tray 74 is not above the fluid level of the cleaning fluid in the cleaning fluid container during the entire feeding operation. Specifically, during the feeding operation the cleaning fluid "level rises above the . . . tray." Davies Patent, col. 4, lines 74-75.

27. Therefore, the Davies Patent does not disclose the claimed elevation of the cradle structure relative to the cleaning fluid level in the cleaning fluid container during feeding.

28. In sum, the Davies Patent does not anticipate claim 11 of the '328 Patent because, at a minimum, it does not disclose the claimed cradle structure, feed device, and elevation of the cradle structure relative to the cleaning fluid level in the cleaning fluid container.

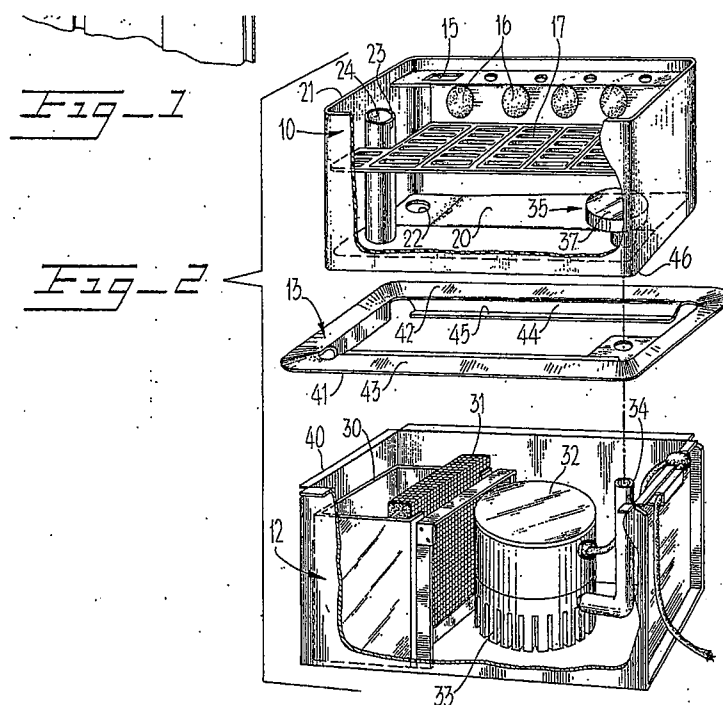
### **Maatz Patent**

29. Mr. Phillips opines that the Maatz Patent (U.S. Patent No. 3,500,840) anticipates claim 11 of the '328 Patent. See Phillips 1<sup>st</sup> Rep. at ¶¶122-127. I disagree. In particular, the Maatz Patent fails to disclose at least the following elements of claim 11:

- “a cradle structure adapted to receive a shaving head of a shaving apparatus,” and
- “a drying device.”

30. The Maatz Patent discloses another sterilizing device for barber shop tools. See Maatz Patent, col. 1, lines 23-25. Figure 2 of the Maatz Patent is reproduced below. The Maatz sterilizer includes a storage tank (12) that holds a filter tank (30) and a pump (32). See id., col. 2, lines 43-45. The filter tank consists of a filter (31) and holds sterilizing fluid. See id. The Maatz sterilizer also includes a cleaning tank (10) with a rack (15) with holes and slots for holding barber tools and a grid (17) for holding larger barber tools. See id., col. 2, lines 20-23. In operation, cleaning fluid is pumped from the filter tank (30) to the cleaning tank (10) and allowed to drain via drain hole (22) back to the filter tank, where the cleaning fluid is filtered. The pump and drain hole are designed

such that the pump pumps fluid into the cleaning tank at a rate faster than it can exit the tank via the drain hole, allowing cleaning fluid to build up in the cleaning tank.



31. *Cradle Structure Element.* Mr. Phillips argues that the cleaning tank 10 is “a cradle structure adapted to receive a shaving head of a shaving apparatus.” See Phillips 1<sup>st</sup> Rep. at ¶122. In doing so, Mr. Phillips cites to a portion of the Maatz Patent that describes rack (15) and grid (17). I disagree that either cleaning tank 10 or rack (15)/grid (17) discloses the claimed cradle structure.

32. In particular, cleaning tank (10) is simply a large rectangular tub that is filled with cleaning fluid. It is adapted to receive sterilizing fluid; it is not adapted to receive a shaving head of a shaving apparatus. Nor are rack (15) and grid (17) properly considered “cradle structures” for a shaving head of a shaving apparatus. To the extent a “hair clipper” is considered a “shaving apparatus” as described in ’328 Patent, it is clear

that the Maatz sterilizer would require disassembly of the clipper head and removal of the clipper blades therefrom. Rack (15) and grid (17) merely provide surfaces onto which clipper blades that have been disassembled from the head of a hair clipper apparatus can be supported by means of magnets. See Maatz Patent, col. 2, lines 27-32. Such surfaces cannot be properly called “cradle structures” and are not adapted to receive a shaving head of a shaving apparatus.

33. Therefore, the Maatz Patent does not disclose the claimed cradle structure.

34. *Drying Device Element.* Mr. Phillips next argues that drain hole 22 is “a drying device.” See Phillips 1<sup>st</sup> Rep. at ¶127. I disagree.

35. In particular, drain hole 22 merely drains the sterilizing fluid from the cleaning tank to the storage tank. The tools then drip dry. See Maatz Patent, col. 3, lines 26-30. The drain hole 22 is not a drying device since it is not a mechanism for active drying of the barber tools.

36. Therefore, the Maatz Patent does not disclose the claimed drying device.

37. In sum, the Maatz Patent does not anticipate claim 11 of the '328 Patent because, at a minimum, it does not disclose the claimed cradle structure and drying device.

## II. INDEFINITENESS

38. Mr. Phillips opines that the “cradle structure” element of the asserted claims of the '328 Patent are “indefinite” because, according to Mr. Phillips, the Court’s

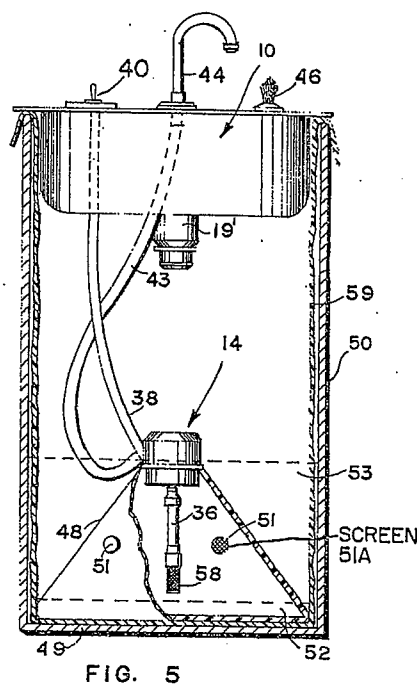
construction “does not distinguish the structures that Braun argued were not ‘cradle structures’ that met the limitations in the patent[s].” Phillips 1<sup>st</sup> Rep. at ¶49. I disagree.

39. The cradle structure element of the asserted claims of the ’328 Patent is “a cradle structure adapted to receive a shaving head of a shaving apparatus.” This element has been construed by the Court to be a structure adapted to support or receive a shaving head of a shaving apparatus and able to receive or retain fluid or both.

40. Contrary to Mr. Phillips’ suggestion, the prosecution histories of the patents-in-suit are not at odds with either the Court’s construction or the ordinary artisan’s understanding of the patents.

#### Lee Patent

41. Claim 1 of the ’556 patent was initially rejected because – according to the Examiner – the Lee Patent (U.S. Patent No. 3,890,988) disclosed “a cradle adapted to receive the article therein.” See Declaration of Dalila Arguez Wendlandt In Support Of



Braun GmbH's Motion For Partial Summary Judgment On Invalidity ("Wendlandt Decl."), Exhibit D at B000084. The Lee patent (Figure 5 of which is reproduced above) discloses a metal sink 10 into which cleaning fluid is pumped by pump assembly 14 for cleaning automobile parts. See Lee Patent at col. 3, lines 37-42.

42. In response to the Examiner's rejection, Braun distinguished the Lee Patent as nonanalogous art. See Wendlandt Decl., Exhibit D at B000095. In addition, Braun distinguished the Lee automotive part cleaner on the basis that it did not contain a cradle adapted to receive a shaving head. See id. at B000096. As Braun describes, the Lee device is "not adapted to 'cradle' anything much less a shaving head. The specification makes it quite clear that 'a cradle adapted to receive therein a shaving head' is not an open basin into which the shaving apparatus can be tossed without any means designed to particularly receive and/or cradle the shaving head." Id.

43. This prosecution history is consistent with the Court's construction. First, claim 1 of the '556 Patent already includes a preamble limitation, claiming the invention is a device for cleaning a shaving head of a dry shaver, not automotive parts. Second, the Court's construction make clear that the cradle structure is suitable for the specific use of receiving the shaving head of a shaving apparatus, which distinguishes it from the metal sink of the Lee Patent.

#### Schinn Patent

44. Braun's treatment of the Schinn Patent (U.S. Patent No. 4,815,486) during the prosecution history of the '556 Patent is consistent with the Court's construction of the cradle structure element.

45. The Schinn patent (Figure 2 of which is reproduced below) is a paint equipment cleaner wherein paint equipment is hung on hooks 18 or a wire basket 20 inside drum 14, which is filled with solvent. Then, the entire drum is spun. The solvent is then pumped out of the drum 14 into a filtering cleaning tank. See Schinn Patent at col. 3, lines 63-67, col. 4, lines 30-55.

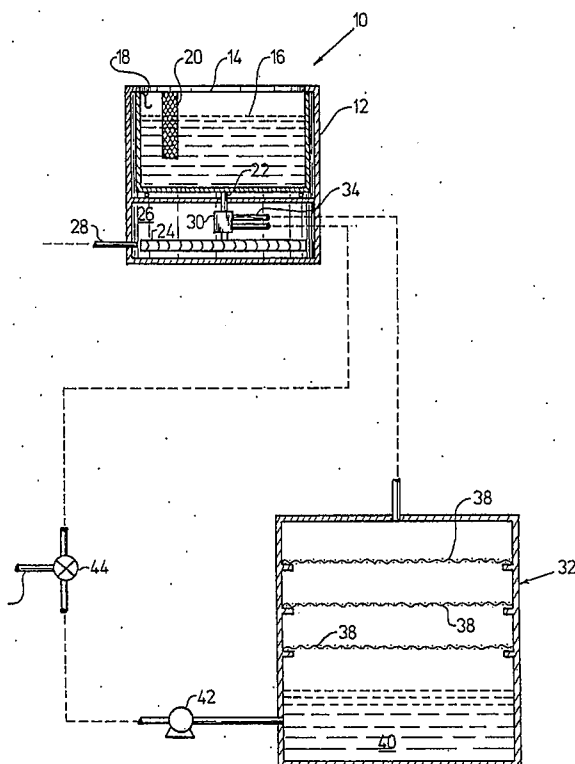


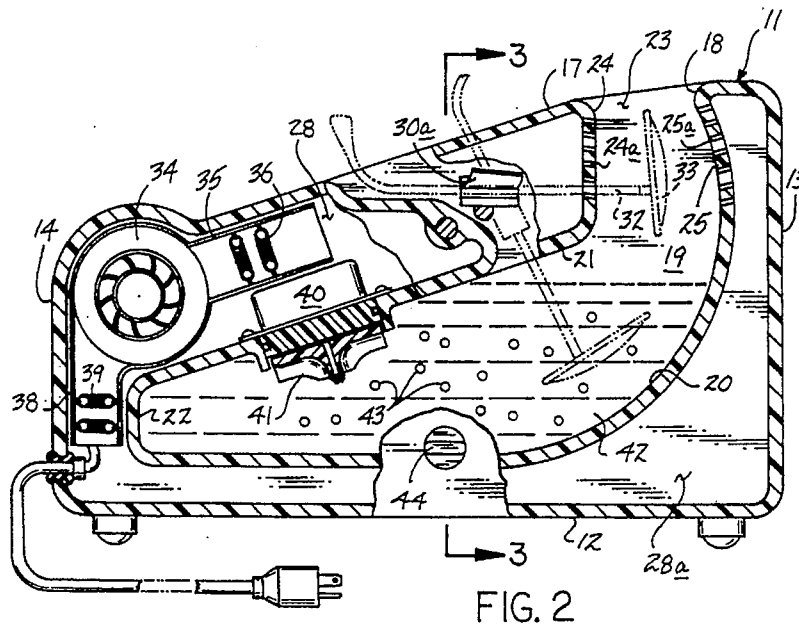
FIG 2

46. As with the Lee Patent, Braun objected to the Schinn patent as nonanalogous art. See Wendlandt Decl., Exhibit D at B000103-04. In addition, Braun distinguished the Schinn paint equipment cleaner on the ground that the patent did not contain a cradle adapted to receive a shaving head. See id. at B000103. The Schinn devices hooks and wire baskets are adapted to receive paint equipment. See id.

Thus, the prosecution history relating to the Schinn Patent is consistent with the Court's construction of the cradle structure element.

### Cunningham Patent

47. Similarly, the '328 Patent's prosecution history of the Cunningham patent (U.S. Patent No. 5,335,394) is consistent with the Court's construction. The Cunningham cleaning device (Figures 2 and 4 of the Cunningham patent are reproduced below) consists of a U-shaped container (18), containing cleaning fluid, into which eyeglasses are inserted. See Cunningham Patent, col. 3, lines 48-52. The eyeglasses are cleaned by means of an agitation device (40, 41) which circulates the cleaning fluid within the U-



shaped container. See id. at col. 4, lines 37-42. Cunningham also discloses a basket 45 for placement of dentures. As with the eyeglasses, the basket 45 is dunked into the cleaning fluid held in U-shaped container 18.



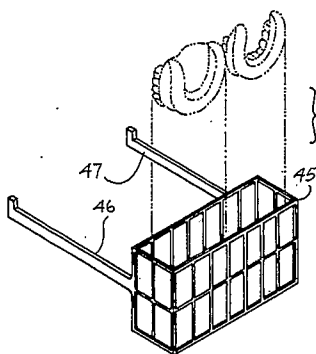


FIG. 4

48. As Braun explained in the prosecution history, the Cunningham patent does not teach a cradle to support an object into which cleaning fluid is fed that is above the fluid level of the cleaning fluid in the cleaning fluid container. See Wendlandt Decl., Exhibit C at B000335. It merely teaches a cleaning fluid container filled with cleaning fluid into which eyeglasses or a basket carrying dentures are dunked and cleaned through the circulation of cleaning fluid caused by an agitation device.

49. The Court's claim construction is consistent with this prosecution history.

50. In sum, the Court's claim construction is consistent with the prosecution history of the patents-in-suit. And, therefore, I disagree with Mr. Phillips' conclusion that the patents are indefinite.

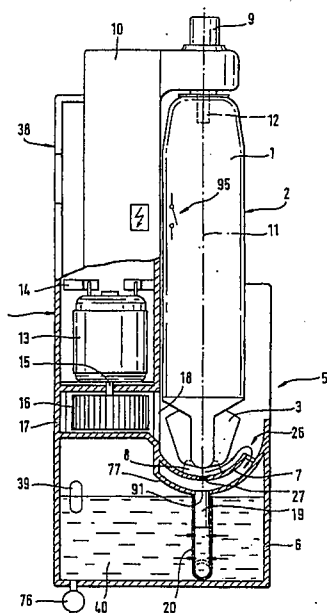
### III. WRITTEN DESCRIPTION

51. Mr. Phillips opines that the '328 Patent is invalid because, according to Mr. Phillips, it lack an adequate written description of the cradle structure as construed by the Court. See Phillips 1<sup>st</sup> Rep. at ¶54. I disagree.

52. As discussed above, the cradle structure element of the claims of the '328 Patent has been construed by the Court to be a structure adapted to support or receive a shaving head of a shaving apparatus and able to receive or retain fluid or both. This construction is consistent with the written description of the invention of the '328 Patent.

53. In particular, in the preferred embodiment of the invention, the cradle 7 is a structure that supports and receives the shaving head of a shaving apparatus. The cradle 7 is able to receive fluid, retain fluid, or both receive and retain fluid. In the preferred embodiment, for example, the cradle is able to receive and retain fluid because the outlet

Fig. 1



port of the cradle is dimensioned such that the inflow of cleaning fluid from the pump is greater than the outflow of cleaning fluid. However, it would be clear to one of ordinary skill in the art that if the outlet port of the cradle were of a greater cross-sectional area, the inflow of cleaning fluid would be smaller than the outflow. In such a configuration, the cradle 7 would receive, but not retain cleaning fluid.

54. Moreover, I understand that limitations from the preferred embodiment ought not to be inserted into the claims. Thus, I do not consider the fact that in the preferred embodiment the outlet port of cradle 7 is dimensioned so that the inflow of cleaning fluid is greater than the outflow to be a limitation of the cradle structure element. In fact, such a limitation is found in dependent claim 2, which provides:

A device as claimed in claim 1, wherein a cross-sectional area of the outlet port is dimensioned such that during the cleaning operation the amount of cleaning fluid drained through the outlet port is smaller than the amount of cleaning fluid supplied to the cradle structure by the feeding device.

'328 Patent, col. 13, lines 38-43.

55. In addition, while this was the inventors' preferred embodiment, during deposition testimony Dr. Pahl testified that he had conceived of a cleaning system wherein liquid was not retained by the cradle, but was flushed through the shaver head. See Transcript of Deposition of Dietrich Pahl on April 28, 2005 ("Pahl Dep.") at 80:2-14. Dr. Pahl concluded that this was not an effective cleaning method, and therefore it is not surprising that this idea was not set forth in the patents as a preferred embodiment.

56. In sum, the Court's claim construction is consistent with the written description of the '328 Patent. And, therefore, I disagree with Mr. Phillips's conclusion that the '328 Patent lacks an adequate written description.

#### **IV. BEST MODE**

57. Mr. Phillips opines that the inventors of the '328 Patent failed to disclose the best mode contemplated by them for carrying out the invention because, according to

Mr. Phillips, the inventors did not adequately disclose their preferred cleaning fluid. See Phillips 1<sup>st</sup> Rep. at ¶¶60-66. I disagree.

58. Mr. Braun testified at his deposition that Dr. Pahl gave him the cleaning fluid used in the cleaning device, and he was not aware of its composition. He thought that the cleaning had to be fat soluble and sebum soluble. See Transcript of Deposition of Gebhard Braun on April 26, 2005 (“Braun Dep. Vol. 1”) at 87:22 through 88:14.

59. Dr. Pahl testified at his deposition that the appropriate cleaning fluid contemplated by him at the time of the invention was “alcohol.” See Pahl Dep. at 165:10-24. He was not sure whether it was methyl or ethyl alcohol. He thought that the cleaning fluid contained a “little bit of grease, of oil to lubricate the cutter elements, and a fragrance.” Id. Dr. Pahl never determined what fragrance would be best. Id. at 166:12-16. He further testified that while he initially had a cleaning fluid made, he subsequently used a spray sold by Braun, and preferred that cleaning fluid. Id. at 166-169.

60. Mr. Hoeser testified that he continued to work with an outside company to develop an appropriate cleaning fluid for the cleaning devices long after Mr. Braun and Dr. Pahl had developed their invention. See Deposition of Juergen Hoeser on May 12, 2005 (“Hoeser Dep. Vol. 2”) at 192-195.

61. The ’328 Patent states that the cleaning fluid that the inventors contemplated was a “fat-dissolving cleaning fluid.” ’328 Patent at col. 6, lines 14-16. Among the most widely used fat solvents (especially in consumer applications) are alcohols, and therefore the phrase “fat-dissolving cleaning fluid” would immediately suggest to one skilled in the art the use of an alcohol-based cleaning fluid. It is not clear

that the inventors knew of any special advantages of alcohol over other solvents, or that they were entirely clear as to what sorts of additives to use. Thus, the phrase “fat-dissolving cleaning fluid” provides an adequate guide to the reader toward the key property of the cleaning fluid.

62. In addition, because the application is cleaning a shaving head, one of ordinary skill would recognize that a lubricant would be desired to maintain the integrity of the cutters within the shaving head. Also, there are several reasons that a low viscosity cleaning fluid is desirable, including ease of pumping. Finally, because the cleaning product is a personal hygiene product, one of ordinary skill would know that a fragrance would be desired as part of the cleaning fluid.

63. Therefore, the '328 Patent does not fail to disclose the best mode of carrying out the invention contemplated by the inventors.

## **V. INVENTORSHIP**

### **Dr. Pahl**

64. I understand that there is no dispute between Braun and Rayovac that Dr. Pahl is a co-inventor of the '328 Patent.

### **Mr. Smetana**

65. Mr. Phillips opines that Norbert Smetana, an engineer who assisted Mr. Braun in the development of the type of drying device used in a prototype cleaning device developed by Mr. Braun, is a co-inventor of unasserted claim 13 of the '328 Patent because, according to Mr. Phillips, Mr. Smetana had the idea for claim 13 of the '328 Patent. See Phillips 1<sup>st</sup> Rep. at ¶69. I disagree.

66. Claim 13 of the '328 Patent provides: "A cleaning device as claimed in claim 12, wherein the drying device further comprises a heater."

67. According to Dr. Pahl, the original prototype developed by Dr. Pahl in Leon, France had a heater and an impeller. See Pahl Dep. at 110:5-15, 148:10-12, 197:17 through 198:7. Mr. Hooser further testified that a November 1992 presentation of Dr. Pahl's prototype illustrates the heater and fan of Dr. Pahl's original prototype. See Transcript of Deposition of Juergen Hooser on May 11, 2005 ("Hooser Dep. Vol. 1") at 83-84. This prototype existed prior to Mr. Smetana's involvement in the cleaning device.

68. Moreover, the use of heat to speed drying was well known by the ordinary artisan prior to Mr. Smetana's involvement in the cleaning device. Indeed, as Mr. Smetana testified, hair dryers have been using impellers coupled with heating elements long before the time Dr. Pahl and Mr. Braun developed their cleaning device. See Transcript of Deposition of Norbert Smetana on April 29, 2005 ("Smetana Dep.") at 48-49 & 50-51.

69. Therefore, Mr. Smetana is not a co-inventor of claim 13 of the '328 Patent.

#### **Mr. Kraus**

70. Mr. Phillips opines that Helmut Kraus, a regulator with the German testing agency for approbation – the VDE – is a co-inventor of unasserted claim 19 of the '328 Patent. See Phillips 1<sup>st</sup> Rep. at ¶69. I disagree.

71. Claim 19 of the '328 Patent provides: "A cleaning device as claimed in claim 18, further comprising a switch for interlocking the shaving apparatus to the bracket."

72. Mr. Braun testified that, based on his own past experience, he was aware of the need to keep the shaver apparatus locked in place during the cleaning operation for safety reasons. See Braun Dep. Vol. 1 at 76-77. He further testified that the idea of providing a switch for interlocking the shaving apparatus to the bracket was his idea. See id. at 68-69. Dr. Pahl confirmed Mr. Braun's recollection. See Pahl Dep. at 111-113.

73. Mr. Kraus's suggestion that a mechanical lock is required to avoid harm to the operator of the shaving device merely restates a safety requirement about which Mr. Braun testified he was aware from his own past experience. The suggestion itself does not disclose how or where the lock should be implemented. In sum, the suggestion does not make Mr. Kraus a coinventor of claim 19, which requires a switch for interlocking the shaving apparatus to the bracket.

## **VI. NEW MATTER**

74. Mr. Phillips opines that the U.S. patent application for the '328 Patent contains new matter not present in the corresponding priority Germany application because a "receptacle" is a different structure than a "cradle structure." See Phillips 1<sup>st</sup> Rep. at ¶58. Mr. Phillips purports to support this opinion on his assertion that a "receptacle can merely maintain a liquid level" whereas a cradle structure can maintain a liquid level but has "the additional characteristic of receiving fluid, but then letting it run out . . . ." Id. I disagree.

75. One of ordinary skill in the art would not construe the phrase “a receptacle adapted to receive a shaving head of a shaving apparatus” as limited to those structures that retain liquid. A receptacle, like a cradle structure, can receive liquid, retain liquid, or both. One skilled in the art would understand that the receptacle receives the shaving head, as explicitly indicated by the phrase “adapted to receive a shaving head of a shaving apparatus.” To one skilled in the art, use of the word “receptacle” rather than “cradle structure” therefore implies no difference in the manner that cleaning fluid is handled.

## VII. ZEISCHKE THESIS

76. In his thesis, Mr. Zeischke describes a system for cleaning a shaving system using dry brushing. See Wendlandt Decl., Exhibits Y & Z. The sketches in his thesis show a cleaning station with two distinct locations for the shaver:

1. A cleaning position indicated by the translated text as “introduce shaver.” These are labeled in the translation as item 2 on page 41 of Zeischke and as item 1 on page 42 of Zeischke.
2. A storage and charging position indicated by the translated text as “park position, shaver for charging.” These are labeled as item 8 on page 41 of Zeischke and item 6 on page 42 of Zeischke.

77. Mr. Phillips argues that these “park positions” constitute brackets as construed by the Court. See Phillips 1<sup>st</sup> Rep. at ¶156. I disagree. A rectangle with some text indicating a location in which a shaver can be placed is not a drawing of a bracket. (In fact, the rectangle sketched on page 41 of the thesis is not even drawn with an opening to the exterior of the housing.) Rather, these rectangles serve only to indicate the general location where a shaver could be placed for storage and charging. More importantly, even if Mr. Zeischke had drawn a bracket into which the electronic shaver



could be inserted for storage and charging, this would not have taught a bracket into which the shaver could be inserted during cleaning. It would require inventiveness for one skilled in the art to go from Mr. Zeischke's system to one in which a bracket is positioned so that the shaver is inserted therein during the cleaning operation.

78. Finally, there is nothing in the Third Phillips Report that would compel me to change my opinions above.

Signed under the pains and penalties of perjury this 22d day of August, 2005.

/s/ Samir Nayfeh  
Samir Nayfeh